ABSTRACT OF THE DISCLOSURE

A used-can processing system includes a shredder for cutting a used drum can, and a pelletizer for pelletizing cut pieces of the used can. The shredder includes a pair of rotary blade units which rotate with their blades meshing each other so as to cut a used drum can thrown from above the shredder, and a pair of auxiliary rotary blade units which face the respective rotary blade units and rotate in the same direction as do the corresponding rotary blade units, to thereby urge the used drum can toward the pair of rotary blade units. Each of the blades of the rotary blade units and the auxiliary rotary blade units has projecting portions and depressed portions formed alternately along the circumferential direction. Moreover, a screen having cut-pieces removal holes is disposed below and along the pair of rotary blade units and the pair of auxiliary rotary blade units.